ABSTRACT OF THE DISCLOSURE

The high thermal conductive aluminum nitride sintered body according to the present invention has: a thermal conductivity of 220 W/m · K or more; and a three point bending strength of 250 MPa or more; wherein a ratio ($I_{Al_2Y_4O_9}/I_{AlN}$) of X-ray diffraction intensity ($I_{Al_2Y_4O_9}$) of $Al_2Y_4O_9$ (201 plane) with respect to X-ray diffraction intensity (I_{AlN}) of aluminum nitride (101 plane) is 0.002 to 0.03. According to the foregoing structure, there can be provided an aluminum nitride sintered body having a high thermal conductivity and excellent heat radiating property.